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WO 03/086333 A1

(54) Title: ANHYDROUS, SINGLE PHASE, TRANSFER RESISTANT COSMETIC LIP COMPOSITIONS

(57) Abstract: The present invention relates to cosmetic compositions that comprise: (A) a mixture of: (1) an organosiloxane resin; and (2) a fluid diorganopolysiloxane polymer having a viscosity of from about 100,000 cSt to about 1,000,000 cSt at 25°C wherein the ratio of (1) to (2) is from about 1:1 to about 20:1; and (B) a volatile carrier wherein said composition is present as a single phase and is an anhydrous liquid lip product. These compositions provide an improved feeling, long wear lip cosmetic product that resists transfer.

## ANHYDROUS, SINGLE PHASE, TRANSFER RESISTANT COSMETIC LIP COMPOSITIONS

### TECHNICAL FIELD

The present invention relates to anhydrous, single-phase cosmetic liquid lip compositions suitable for application to lips that comprise in a single phase an organosiloxane resin, a definitive fluid diorganopolysiloxane polymer, and a volatile carrier. Upon application the composition forms a thin, but, durable film resistant to transfer upon contact with objects such as clothing, towels, handkerchiefs and tissues.

### BACKGROUND

Transfer resistant lip products have gained increasing popularity over the last decade as consumers find themselves consumed with the stress of daily activities. These types of products allow consumers to apply the lip product fewer times in a day but still achieve a freshly applied appearance. One shortcoming of a number of these products, however, has been the undesirable feel on the lips that accompanies the use of such products. In particular, consumers complain of a tight feeling on the lips that typically results from the inclusion of film forming agents into these products that provides the long wear characteristic. Thus, there remains a need for a lip product that not only provides long wear for the consumer but at the same time provides a more pleasurable feel when applied and worn on the lips, e.g., a less tight feeling product that is also less tacky.

### SUMMARY OF THE INVENTION

The cosmetic compositions of the present invention provide a durable film after application that resists degradation over time. Cosmetic compositions of the present invention comprise:

(A) a mixture of:

- (1) an organosiloxane resin; and
- (2) a fluid diorganopolysiloxane polymer having a viscosity of from about 100,000 cSt to about 1,000,000 cSt at 25°C wherein the ratio of (1) to (2) is from about 1:1 to about 20:1; and

(B) a volatile carrier

wherein said composition is present as a single phase and is an anhydrous liquid lip product.

### DETAILED DESCRIPTION

The compositions of the present invention are anhydrous, single phase, transfer-resistant liquid lip cosmetic compositions. Applicants have found that compositions as detailed herein are particularly resistant against insult when subjected to the typical rigors of daily lip exposure.

As used herein, "comprising" means that other steps and ingredients can be added. This term encompasses the terms "consisting of" and "consisting essentially of". The phrase "consisting essentially of" means that the composition may include additional ingredients, but only if the additional ingredients do not materially alter the basic and novel characteristics of the claimed compositions or methods.

The compositions of the present invention necessarily comprise the following ingredients.

#### Organosiloxane Resin

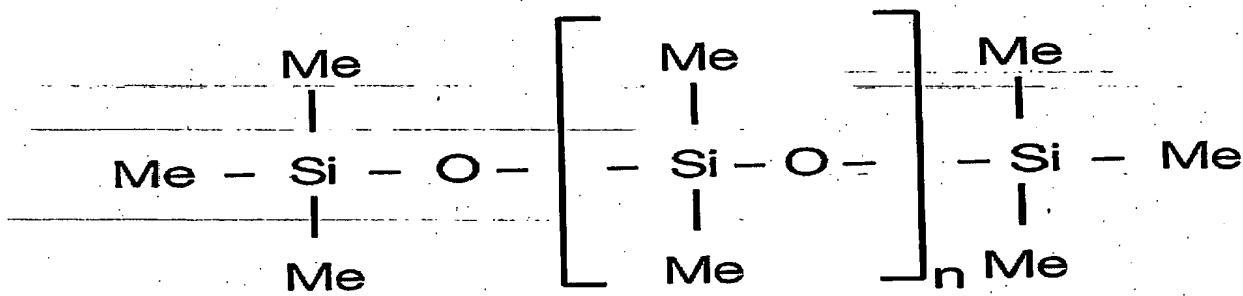
The compositions of the present invention comprise an organosiloxane resin. The resin may comprise combinations of  $R_3SiO_{1/2}$  "M" units,  $R_2SiO$  "D" units,  $RSiO_{3/2}$  "T" units,  $SiO_2$  "Q" units in ratios to each other that satisfy the relationship  $R_nSiO_{(4-n)/2}$  where n is a value between 1.0 and 1.50 and R is a methyl group. Up to 5% of silanol or alkoxy functionality may also be present in the resin structure as a result of processing. The organosiloxane resins must be solid at about 25°C and have a molecular weight range of from about 1,000 to about 10,000 grams/mole. The resin is soluble in organic solvents such as toluene, xylene, isoparaffins, and cyclosiloxanes or the volatile carrier, indicating that the resin is not sufficiently crosslinked such that the resin is insoluble in the volatile carrier. Particularly preferred are resins comprising repeating monofunctional or  $R_3SiO_{1/2}$  "M" units and the quadrafunctional or  $SiO_2$  "Q" units, otherwise known as "MQ" resins as disclosed in U.S. Patent 5,330,747, Krzysik, issued July 19, 1994, incorporated herein by reference. In the present invention the ratio of the "M" to "Q" functional units is preferably about 0.7 and the value of n is 1.2. Organosiloxane resins such as these are commercially available such as Wacker 803 and 804 available from Wacker Silicones Corporation of Adrian Michigan, and G. E. SR1000 from the General Electric Company.

The organosiloxane resins are used in the present invention at levels from about 10% to about 95%, preferably from about 55% to about 80% and most preferably from about 60% to about 70% of the total amount of organosiloxane resin and fluid diorganopolysiloxane polymers.

Fluid Diorganopolysiloxane Polymer

The present invention employs a fluid diorganopolysiloxane polymer that is combined with the organosiloxane resin disclosed above. Applicants have found that suitable polymers exhibit a viscosity of from about 100,000 to about 1,000,000 cSt at 25°C. Preferred fluid diorganopolysiloxane polymers have viscosities of from about 200,000 to about 1,000,000 cSt at 25°C and even more preferred of from about 300,000 to about 1,000,000 cSt at 25°C, and most preferred of from about 300,000 to about 950,000 cSt at 25°C.

The fluid diorganopolysiloxane polymers of the present invention comprise repeating units, wherein said units correspond to the formula  $(R_2SiO)$ , where R is a monovalent hydrocarbon radical containing from 1 to 6 carbon atoms, preferably selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, isobutyl, t-butyl, amyl, hexyl, vinyl, allyl, cyclohexyl, phenyl, fluoroalkyl and mixtures thereof. The diorganopolysiloxane fluids employed in the present invention may contain one or more of these hydrocarbon radicals as substituents on the siloxane polymer backbone. The diorganopolysiloxane fluids may be terminated by triorganosilyl groups of the formula  $(R'_3Si)$  where R' is a radical selected from the group consisting of monovalent hydrocarbons containing from 1-6 carbon atoms, hydroxyl groups, alkoxy groups and mixtures thereof. When a diorganopolysiloxane polymer fluid is present, it is essential that it be compatible in solution with the organosiloxane resin material and the volatile carrier. The term "compatible" refers to the formation of a single phase solution when the diorganopolysiloxane fluid, organosiloxane resin and volatile carrier are mixed together in ratios required for a specific formulation. Therefore, the compositions are considered to be "single phase" in nature as well. A particularly preferred fluid diorganopolysiloxane polymer is poly(dimethylsiloxane), herein referred to as PDMS. A preferred fluid diorganopolysiloxane polymer is DM300,000, which is a 300,000 cSt dimethicone commercially available from Wacker Silicones. This DM300,000 and other suitable fluid diorganopolysiloxane polymers have the following structural formula wherein n = 2000 to 2500.



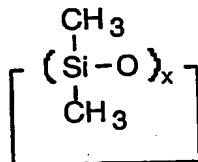
### Volatile Carrier

In the present invention, the combination of the organosiloxane resin and fluid diorganosiloxane polymer above must be easily transferred to the lip surface using a package/applicator. To achieve delivery, it is necessary that this combination above be incorporated into a carrier, specifically a volatile carrier which quickly volatilizes from the surface of the lips leaving the above-discussed thin-durable film. The volatile carrier must solubilize the organosiloxane resin and the fluid diorganosiloxane polymer.

The volatile carrier comprises from about 10% to about 90%, preferably from about 15% to about 80%, and most preferably from about 20% to about 70% of the composition. The volatile carrier of the present invention are selected from the group consisting of volatile hydrocarbons, volatile silicones and mixtures thereof.

Hydrocarbon oils useful in the present invention include those having boiling points in the range of 60-260°C, more preferably hydrocarbon oils having from about C<sub>5</sub> to about C<sub>20</sub> chain lengths, most preferably C<sub>7</sub> to C<sub>16</sub> isoparaffins. Of these isoparaffins most preferred are selected from the group consisting of isododecane, isohexadecane, isoeicosane, 2,2,4-trimethylpentane, 2,3-dimethylhexane and mixtures thereof. Most preferred is isododecane, which is also known as 2,2,4,6,6-pentamethylheptane. Isododecane that is suitable for inclusion in the compositions of the present invention is available from a number of sources, e.g., from Presperse, Inc. as Permethyl 99A.

Preferred volatile silicone fluids include cyclomethicones having 4, 5, and 6 member ring structures corresponding to the formula:



where X is from about 3 to about 6. Said volatile silicones include 244 Fluid, 344 Fluid and 245 Fluid, and 345 Fluid all from Dow Corning Corporation.

#### Thickeners/Structure Builders

The cosmetic composition of the present invention may also comprise at least one of the group consisting of thickeners and structure builders which have the function of dispersing pigments in addition to building viscosity. Thickeners and/or structure builders useful for the present invention include, but are not limited to, organically modified clays. Organically modified clays useful for the present invention include, but are not limited to, hectorite and/or bentonite.

When organically modified clays are present, the compositions comprise less than about 3.5%, by weight of the composition, more preferably, from about 1.5% to about 3%, and most preferably from about 2% to about 3%.

#### Pigments

Pigments suitable for use herein are all inorganic and organic colors/pigments suitable for use in lip composition compositions. These are usually aluminum, barium or calcium salts or lakes. Lakes are either a pigment that is extended or reduced with a solid diluent or an organic pigment that is prepared by the precipitation of a water-soluble dye on an adsorptive surface, which usually is aluminum hydrate. A lake also forms from precipitation of an insoluble salt from an acid or basic dye. Calcium and barium lakes are also used herein.

Preferred lakes of the present invention are Red 3 Aluminum Lake, Red 21 Aluminum Lake, Red 27 Aluminum Lake, Red 28 Aluminum Lake, Red 33 Aluminum Lake, Yellow 5 Aluminum Lake, Yellow 6 Aluminum Lake, Yellow 10 Aluminum Lake, Orange 5 Aluminum Lake and Blue 1 Aluminum Lake, Red 6 Barium Lake, Red 7 Calcium Lake, Red 30 Talc Lake, and Red 30 Aluminum Lake.

Other colors and pigments can also be included in the lip compositions, such as dyes and pearls, titanium oxides, Red 6, Red 21, Blue 1, Orange 5, and Green 5 dyes, chalk, talc, iron oxides and titanated micas.

Compositions of the present invention contain sufficient pigments to provide the look sought by the user. The pigments are used herein at levels relative to the level of the fluid diorganopolysiloxane polymers disclosed above. This level is expressed as a ratio of the combination of fluid diorganopolysiloxane polymer and organosiloxane resin to pigment. In the present invention this ratio is from about 1:1 to about 30:1, preferably from about 1.5:1 to about 15:1, and most preferably from about 2:1 to about 10:1.

Additionally, the cosmetic compositions of the present invention are anhydrous. As used herein "anhydrous" means that the compositions comprise less than about 5%, by weight of the composition, of water, more preferably less than about 2%, and even more preferably less than about 1%.

#### Waxes

Waxes may be used in the present invention provided they are used at levels which does not interfere with film formation process.

Waxes are defined as lower-melting organic mixtures or compounds of high molecular weight, solid at room temperature and generally similar in composition to fats and oils except that they contain no glycerides. Some are hydrocarbons, others are esters of fatty acids and alcohols. Waxes useful in the present invention are selected from the group consisting of animal waxes, vegetable waxes, mineral waxes, various fractions of natural waxes, synthetic waxes, petroleum waxes, ethylenic polymers, hydrocarbon types such as Fischer-Tropsch waxes, silicone waxes, and mixtures thereof.

The specific waxes useful in the present invention are selected from the group consisting of synthetic waxes, ozokerite, jojoba esters, "Unilins", available from Petrolite Corporation, "Ganex" alkylated polyvinylpyrrolidines available from the ISP Company, fatty alcohols from C<sub>22</sub> to C<sub>50</sub> and mixtures thereof. Synthetic waxes include those disclosed in Warth, Chemistry and Technology of Waxes, Part 2, 1956, Reinhold Publishing; herein incorporated by reference. The waxes most useful herein are selected from the C<sub>8</sub> to C<sub>50</sub> hydrocarbon waxes. Such waxes include long chained polymers of ethylene oxide combined with a dihydric alcohol, namely polyoxyethylene glycol. Such waxes include carbowax available from Carbide and Carbon Chemicals company. Other synthetic waxes include long-chained polymers of ethylene with OH or other stop length grouping at end of chain. Such waxes include the Fischer-Tropsch waxes as disclosed in the text disclosed above at pages 465-469 and include Rosswax, available from Ross company and PT-0602 available from Astor Wax Company.

The cosmetic compositions of the present invention are also in the form of liquid lip products. As such, the compositions comprise less than about 2%, by weight of the composition, of waxes, more preferably, less than about 1%, and most preferably less than about 0.5%.

Other Ingredients

There are a number of other ingredients approved for use in the cosmetic art that may be used in compositions of the present invention. Such ingredients are those approved for use in cosmetics and can be found listed in reference books such as the CTFA Cosmetic Ingredient Handbook, Second Edition, The Cosmetic, Toiletries, and Fragrance Association, Inc. 1988, 1992. Said materials may be used provided their inclusion does not significantly disrupt the composition once it has been applied wherein a film has been formed. Said ingredients include waxes, fragrances, flavor oils, skin care ingredients such as sunscreen, emulsifiers and the like. Hypoallergenic compositions can be made into the present invention where said compositions do not contain fragrances, flavor oils, lanolin, sunscreens, particularly PABA, or other sensitizers and irritants.

Complimentary products may be used in conjunction with the present invention to compliment the composition and improve its aesthetic appeal to the user. In particular, it is intended that the cosmetic compositions of the present invention may be paired in a lip cosmetic kit with such a complementary product.

It is specifically envisioned that the complementary products used in the present invention manner wherein such a product is applied over the film formed after application of the cosmetic composition of the present invention. For example in the case of lip compositions, a complimentary product may be utilized to enhance the gloss and shine of the lips and provide a lubricious feeling. Such products, otherwise known as an "overcoat" or "topcoat" may be in a stick or liquid form and can include any that are commercially available or to be developed, provided the aggregate of the materials comprising the overcoat does not significantly disrupt the composition of the present invention. The overcoat compositions may be clear or transparent or may contain dyes and/or colorants that when viewed along with the overcoat, produce a desired color.

One such material that has been shown to be quite useful in formulating complimentary products is polyol polyesters, such as sucrose polyesters (herein referred to as SPE'S). SPE's are synthesized molecules derived from sugar and vegetable oil and have been extensively disclosed in the patent literature in context of a non-digestible oils. Such compositions are generally disclosed in U. S. Patents 3,600,186, issued August 17, 1971; 4,005,195, issued January 25, 1977; 4,005,196, issued January 25, 1977; all assigned to the Procter & Gamble Company and all herein incorporated by reference.

It has found that overcoat compositions having a significant level of SPE'S are incompatible with the lip composition of the present composition wherein upon their application, the cosmetic composition of the present invention is not disrupted.

In a preferred embodiment of the present invention, a complementary product comprising a topcoat composition comprises a safe and effective amount of a polymeric vegetable oil emollient. More preferably, the polymeric vegetable oil emollient is a copolymer of Brassica Campestris and Aleurites Fordii oil (also known as polytriglycerol erucate/eliostearate), which is an unsaturated complex ester ranging in molecular weight from 25,000 to 110,000 (or 6500 to about 7500 daltons). This emollient is commercially available from Tri-K under the tradename Glossamer L-6600 and allows the topcoat to form a protective film over the cosmetic compositions of the present invention. Such a topcoat composition aids in providing a creamier feel to the applied basecoat and topcoat and also enhances the water and rub-off resistance of the cosmetic composition as well as the topcoat composition. In more preferred embodiments, the polymeric vegetable oil emollient is present in an amount of from about 0.1% to about 50%, more preferably, from about 2% to about 20%, and most preferably, from about 4% to about 15%, by weight of the topcoat composition.

#### METHOD OF USING THE INVENTION

The method of the present invention is straightforward. The user applies the composition of the present invention from a suitable liquid cosmetic applicator directly onto the skin. One such applicator used for liquid products is a liquid pen package disclosed in British Patent 21198037, issued 5/09/90, assigned to Mitsubishi Pencil Co., Ltd. of Japan. An alternative package is one where an wand is dipped into a reservoir wherein the composition on the tip of the wand is applied to the skin surface. Such packages are disclosed in Japanese Utility Model 64 000822 Y2, to Shiseido.

Another cosmetic dispenser that is useful for the present invention is a unidirectional twist-up dispensing device with incremental dosing as disclosed in US Patent 5851079, issued on December 22, 1998 to Richard L. Horstman et al. Such a twist-up dispensing device can include a hollow housing defining a chamber having an open dispensing end and a piston located within the chamber being limited to translational movement within the chamber. The piston preferably having a threaded rod extending therefrom that engages with a threaded aperture in an actuator such that advancement of the piston toward the dispensing end occurs when the actuator is rotated. Rotation of the

actuator causes the product to be dispensed from the dispensing end. An applicator is preferably attached to the dispensing end of the housing in fluid communication with the chamber wherein the product is dispensed through the applicator. The applicator can comprise a ferrule and an application portion wherein the ferrule is attached to the dispensing end of the housing and the application portion has at least one orifice located therein. Several versions of applicators can be utilized including, for example, a fiber brush or an application surface having flocking thereon. Flocking is a mat of thin, short, plastic fibers substantially perpendicular to the application surface. The bristles of a fiber brush are preferably tapered and made of a plastic material. Alternatively, the user may use a more traditional applicator or implement known in the art.

As stated above, the user applies the composition wherein the user allows the composition to dry before subjecting the composition to insult. Once the composition is dried, a complimentary product such as the topcoat product disclosed above may be applied over the dried product to provide the user with an aesthetically pleasing affect. Topcoat compositions may utilize the same dispensing device as described for use of the compositions of the present invention.

The compositions of the present invention may be removed by applying petrolatum or a dimethicone-based cosmetic remover and by rubbing the area gently with a tissue to remove the cosmetic.

### EXAMPLES

The following examples illustrate the examples of the claimed cosmetic compositions of the present invention but are not intended to be limiting thereof:

**Example 1:**

<u>Ingredients</u>	<u>Weight (%)</u>
<b>Group A:</b>	
Polydimethylsiloxane <sup>1</sup>	10
Bentone Gel <sup>2</sup>	20
Isododecane <sup>3</sup>	40
<b>Group B:</b>	
Organosiloxane Resin <sup>4</sup>	20
Red #7 Calcium Lake	5
Titanated Mica <sup>5</sup>	3
Titanium Dioxide	1.5
Black Iron Oxide	.5

1. 300,000 cSt polydimethylsiloxane available as DM300000 from Wacker Silicones. May also substitute polydimethylsiloxanes with viscosities at 25°C of 400,000 cSt, 500,000 cSt, 600,000 cSt, 700,000 cSt, 800,000 cSt, and 900,000 cSt.
2. Bentone Gel ISD available from Elementis
3. Permethyl 99A available from Permethyl Corporation.
4. MQ Resin (0.7:1 M:Q) available as SR1000 from General Electric
5. Flamenco Superpearl available from Engelhard

Combine Group A ingredients together in a beaker and mix with a propeller mixer until the mixture is homogeneous. Add Group B ingredients to the Group A Mixture and dry mix the mixture to roughly incorporate the dry powders. Then homogenize the formulation until all pigments are fully dispersed. Transfer the resulting fluid to individual packages.

**Example 2:**

<u>Ingredients</u>	<u>Weight (%)</u>
<b>Group A:</b>	
Polydimethylsiloxane <sup>1</sup>	8
Bentone Gel <sup>2</sup>	30
Isododecane <sup>3</sup>	35
<b>Group B:</b>	
Organosiloxane Resin <sup>4</sup>	17
Red #7 Calcium Lake	5
Titanated Mica <sup>5</sup>	3
Titanium Dioxide	1.5
Black Iron Oxide	.5

- 1 300,000 cSt polydimethylsiloxane available as DM300000 from Wacker Silicones. May also substitute polydimethylsiloxanes with viscosities at 25°C of 400,000 cSt, 500,000 cSt, 600,000 cSt, 700,000 cSt, 800,000 cSt, and 900,000 cSt.
- 2 Bentone Gel ISD available from Elementis
- 3 Permethyl 99A available from Permethyl Corporation.
- 4 MQ Resin (0.7:1 M:Q) available as SR1000 from General Electric
- 5 Flamenco Superpearl available from Engelhard

Combine Group A ingredients together in a beaker and mix with a propeller mixer until the mixture is homogeneous. Add Group B ingredients to the Group A Mixture and dry mix the mixture to roughly incorporate the dry powders. Then homogenize the formulation until all pigments are fully dispersed. Transfer the resulting fluid to individual packages.

**Example 3:**

<u>Ingredients</u>	<u>Weight (%)</u>
<b>Group A:</b>	
Polydimethylsiloxane <sup>1</sup>	10
Bentone Gel <sup>2</sup>	20
Isododecane <sup>3</sup>	30
<b>Group B:</b>	
Organosiloxane Resin <sup>4</sup>	20
Red #7 Calcium Lake	10
Titanated Mica <sup>5</sup>	6
Titanium Dioxide	3
Black Iron Oxide	1

- 1 300,000 cSt polydimethylsiloxane available as DM300000 from Wacker Silicones. May also substitute polydimethylsiloxanes with viscosities at 25°C of 400,000 cSt, 500,000 cSt, 600,000 cSt, 700,000 cSt, 800,000 cSt, and 900,000 cSt.
- 2 Bentone Gel ISD available from Elementis
- 3 Permethyl 99A available from Permethyl Corporation.
- 4 MQ Resin (0.7:1 M:Q) available as SR1000 from General Electric
- 5 Flamenco Superpearl available from Engelhard

Combine Group A ingredients together in a beaker and mix with a propeller mixer until the mixture is homogeneous. Add Group B ingredients to the Group A Mixture and dry mix the mixture to roughly incorporate the dry powders. Then homogenize the formulation until all pigments are fully dispersed. Transfer the resulting fluid to individual packages.

**Example 4:**

<u>Ingredients</u>	<u>Weight (%)</u>
<b>Group A:</b>	
Polydimethylsiloxane <sup>1</sup>	10
Bentone Gel <sup>2</sup>	20
Cyclomethicone <sup>3</sup>	40
<b>Group B:</b>	
Organosiloxane Resin <sup>4</sup>	20
Red #7 Calcium Lake	5
Titanated Mica <sup>5</sup>	3
Titanium Dioxide	1.5
Black Iron Oxide	.5

1. 500,000 cSt polydimethylsiloxane available as DM300000 from Wacker Silicones. May also substitute polydimethylsiloxanes with viscosities at 25°C of 400,000 cSt, 500,000 cSt, 600,000 cSt, 700,000 cSt, 800,000 cSt, and 900,000 cSt.
2. VS-5 PC available from Elementis
3. DC245 available from Dow Corning
4. MQ Resin (0.7:1 M:Q) available as SR1000 from General Electric
5. Flamenco Superpearl available from Engelhard

Combine Group A ingredients together in a beaker and mix with a propeller mixer until the mixture is homogeneous. Add Group B ingredients to the Group A Mixture and dry mix the mixture to roughly incorporate the dry powders. Then homogenize the formulation until all pigments are full dispersed. Transfer the resulting fluid to individual packages.

**Examples 5-10**

Complementary topcoat compositions that can be paired with the basecoat compositions of the present invention are made by combining the following ingredients.

Ingredient	Example 5	Example 6	Example 7	Example 8	Example 9	Example 10
Sucrose						
Polycottonseedate	81.800	83.800	75.800	86.800	74.800	70.800
Propylparaben	0.100	0.100	0.100	0.100	0.100	0.100
Beeswax	5.500	4.500	8.500	5.500	5.500	7.500
Ozokerite	5.500	4.500	8.500	5.500	5.500	7.500
Propyl Gallate	0.050	0.050	0.050	0.050	0.050	0.050
Glossamer L-6600	7.000	7.000	7.000	2.000	14.000	14.000
Ethylene Brassylate	0.050	0.050	0.050	0.050	0.050	0.050
Total	100.000	100.000	100.000	100.000	100.000	100.000

Once ingredients are mixed, topcoat compositions are poured into individual packages.

**Examples 11-16**

Complementary topcoat compositions that can be paired with the basecoat compositions of the present invention are made by combining the following ingredients.

Ingredient	Example 11	Example 12	Example 13	Example 14	Example 15	Example 16
Sucrose						
Polycottonseedate	76.800	78.800	65.800	71.800	73.600	55.800
Propylparaben	0.100	0.100	0.100	0.100	0.100	0.100
Beeswax	5.500	4.500	8.500	5.500	5.500	7.500
Ozokerite	5.500	4.500	8.500	5.500	5.500	7.500
Propyl Gallate	0.050	0.050	0.050	0.050	0.050	0.050
Glossamer L-6600	7.000	7.000	7.000	2.000	14.000	14.000
Ethylene Brassylate	0.050	0.050	0.050	0.050	0.050	0.050
Silk Mica	-	3.500	-	-	0.100	0.500
Gemtone Tan Opal	-	-	-	1.500	0.100	
Colorona Bronze	0.500	-	-	-	0.100	0.500
Black Mica	-	0.500	-	-	0.100	-
Cloisonne Nu-Antique						
Bronze	-	-	-	-	0.100	0.200
Colorona Magenta	-	-	9.000	-	0.100	1.000
Cloisonne Nu-Antique						
Rouge Flambe	-	-	-	-	0.100	-
Gemtone Garnet	4.500	-	-	-	0.100	4.500
Timica Extra-Large						
Sparkle	-	0.500	-	-	0.100	
Flamenco Gold	-	-	-	13.500	0.100	8.000
Timiron MP 24	-	-	1.000	-	0.100	-
Cloisonne Rouge						
Flambe	-	0.500	-	-	0.100	0.300
Total	100.000	100.000	100.000	100.000	100.000	100.000

Once ingredients are mixed, topcoat compositions are poured into individual packages.

What is claimed is:

1. A cosmetic composition comprising:
  - (A) a mixture of:
    - (1) an organosiloxane resin; and
    - (2) a fluid diorganopolysiloxane polymer having a viscosity of from about 100,000 cSt to about 1,000,000 cSt at 25°C wherein the ratio of (1) to (2) is from about 1:1 to about 20:1; and
  - (B) a volatile carrier  
wherein said composition is present as a single phase and is an anhydrous liquid lip product.
2. The cosmetic composition of claim 1 further comprising an organically modified clay wherein the organically modified clay is hectorite, bentonite, or mixtures thereof.
3. The cosmetic composition of claim 1 wherein the organosiloxane resin comprises  $R_3SiO_{1/2}$  "M" units,  $R_2SiO$  "D" units,  $RSiO_{3/2}$  "T" units,  $SiO_2$  "Q" units and mixtures thereof in a ratio selected to satisfy the relationship  $R_nSiO_{(4-n)/2}$ , wherein  $n$  is from about 1.0 to about 1.50 and R is a methyl group, wherein the resin is solid at about 25°C, has a molecular weight range from about 1,000 to about 10,000 grams/mole and is soluble in organic solvents.
4. The cosmetic composition of claim 1 wherein the organosiloxane resin comprises  $R_3SiO_{1/2}$  "M" units and  $SiO_2$  "Q" units wherein the ratio of  $R_3SiO_{1/2}$  to  $SiO_2$  is about 0.7 wherein  $n$  is about 1.2.
5. The cosmetic composition of claim 1 wherein the fluid diorganopolysiloxane polymer comprises repeating units of the formula  $(R_2SiO)$ , where R is a hydrocarbon side group containing from 1 to 6 carbon atoms.
6. The cosmetic composition of claim 6 wherein said hydrocarbon side group is selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, isobutyl, t-butyl, amyl, hexyl, vinyl, allyl, cyclohexyl, phenyl, fluoroalkyl and

mixtures thereof and wherein the fluid diorganopolysiloxane polymer is terminated by triorganosilyl groups of the formula (R<sup>1</sup><sub>3</sub>Si) where R<sup>1</sup> is a monovalent hydrocarbon radical selected from the group consisting of 1 to 6 carbon atoms, hydroxyl groups, an alkoxy groups and mixtures thereof.

7. The cosmetic composition of claim 6 wherein the fluid diorganopolysiloxane polymer is a polydimethyl siloxane.
8. The cosmetic composition of claim 1 wherein the diorganopolysiloxane polymer has a viscosity of from about 200,000 to about 1,000,000 cSt at 25°C.
9. The cosmetic composition of claim 1 wherein the volatile carrier is selected from the group consisting of hydrocarbon oils, silicone oils and mixtures thereof.
10. The cosmetic composition of Claim 1 wherein the volatile carrier is isododecane.
11. A method of applying the composition of claim 1 to lips, said method comprising the steps of:
  - a. applying the composition from a suitable cosmetic applicator directly onto the lips; and
  - b. allowing said composition to form a dry film on the lips before subjecting the film to insult.
12. The method of claim 11 that comprises the additional step of applying a complimentary product on said dried film comprising a topcoat composition, wherein the topcoat composition is a safe and effective amount of a polymeric vegetable oil emollient and where upon applying said complimentary product said film is not disrupted.
13. A lip cosmetic kit comprising:
  - a. a cosmetic composition comprising:

1. a mixture of:
  - (A) an organosiloxane resin; and
  - (B) a fluid diorganopolysiloxane polymer having a viscosity of from about 100,000 cSt to about 1,000,000 cSt at 25°C wherein the ratio of (1) to (2) is from about 1:1 to about 20:1; and
2. a volatile carrier; wherein said cosmetic composition is present as a single phase and is an anhydrous liquid lip product; and

b. a complimentary product comprising a topcoat composition that comprises a safe and effective amount of a polymeric vegetable oil emollient.

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/US 03/10690

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61K7/025

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 139 823 A (DRECHSLER LEE ELLEN ET AL) 31 October 2000 (2000-10-31) column 2, line 19-22; examples 6,8,10,29,20-22 column 7, line 31 -column 9, line 18 column 10, line 48 - line 65; example 3	1-11
Y	US 6 071 503 A (DRECHSLER LEE ELLEN ET AL) 6 June 2000 (2000-06-06) column 2, line 19 - line 32 examples 1,3,15,16,25 column 2, line 51 - line 62 column 7, line 5 -column 8, line 53 column 10, line 23 - line 49	12,13
X	US 6 071 503 A (DRECHSLER LEE ELLEN ET AL) 6 June 2000 (2000-06-06) column 2, line 19 - line 32 examples 1,3,15,16,25 column 2, line 51 - line 62 column 7, line 5 -column 8, line 53 column 10, line 23 - line 49	1-11
Y	US 6 071 503 A (DRECHSLER LEE ELLEN ET AL) 6 June 2000 (2000-06-06) column 2, line 19 - line 32 examples 1,3,15,16,25 column 2, line 51 - line 62 column 7, line 5 -column 8, line 53 column 10, line 23 - line 49	12,13
		-/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

Inte  
nal Application No  
PCT/US 03/10690

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 318 775 A (SHORE KATHLEEN M ET AL) 7 June 1994 (1994-06-07) column 1, line 50-68 column 3, line 14 - line 21 examples	2
Y	DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; RIZZI, RITA ET AL: "Glossamer. A new multifunctional polymer of natural origin for the cosmetic industry" retrieved from STN Database accession no. 135:50840 XP009014799 abstract & COSMETIC NEWS (2000), 23(134), 298-301 , page 300, column 3, line 19 - line 34; example 4	12,13
A	DATABASE WPI Section Ch, Week 198620 Derwent Publications Ltd., London, GB; Class A96, AN 1986-128186 XP002249526 & JP 61 065809 A (SHISEIDO CO LTD), 4 April 1986 (1986-04-04) abstract	1-11
A	EP 0 602 905 A (REVLON CONSUMER PROD CORP) 22 June 1994 (1994-06-22) page 2, line 20 -page 3, line 25; claims; examples 1-3	1,9,10
A	US 6 027 738 A (STEPNIEWSSKI GEORGE J ET AL) 22 February 2000 (2000-02-22) claims; examples	1-11
A	WO 96 19185 A (PROCTER & GAMBLE) 27 June 1996 (1996-06-27) page 1, line 12 -page 2, line 10; claims; examples	12,13

## INTERNATIONAL SEARCH REPORT

## Information on patent family members

Int'l Application No  
PCT/US 03/10690

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6139823	A 31-10-2000	US 6406683 B1 AT 225643 T AU 719603 B2 AU 7476096 A AU 721756 B2 AU 7476196 A AU 721752 B2 AU 7522096 A BR 9611420 A BR 9611421 A BR 9611431 A CA 2236790 A1 CA 2236942 A1 CA 2236974 A1 CN 1204252 A ,B CN 1206345 A ,B CZ 9801404 A3 CZ 9801406 A3 CZ 9801408 A3 DE 69624255 D1 DE 69624255 T2 EP 0862411 A1 EP 0862412 A1 EP 0868169 A1 ES 2180804 T3 HU 9900113 A2 HU 9901986 A2 JP 2000500135 T JP 2000501074 T JP 2000501075 T NO 982033 A NO 982034 A NO 982035 A NZ 321429 A NZ 321430 A NZ 321800 A PL 326676 A1 PL 326679 A1 PL 326705 A1 SK 59298 A3 SK 59398 A3 SK 59498 A3 TR 9800809 T2 TR 9800810 T2 TR 9800812 T2 WO 9717057 A1 WO 9717058 A1	18-06-2002 15-10-2002 11-05-2000 29-05-1997 13-07-2000 29-05-1997 13-07-2000 29-05-1997 23-02-1999 23-02-1999 23-02-1999 15-05-1997 15-05-1997 15-05-1997 06-01-1999 27-01-1999 14-10-1998 14-10-1998 16-09-1998 14-11-2002 12-06-2003 09-09-1998 09-09-1998 07-10-1998 16-02-2003 28-05-1999 29-11-1999 11-01-2000 02-02-2000 02-02-2000 07-07-1998 07-07-1998 07-07-1998 29-11-1999 28-10-1999 28-10-1999 12-10-1998 12-10-1998 26-10-1998 04-11-1998 04-11-1998 04-11-1998 21-09-1998 21-09-1998 21-07-1998 15-05-1997 15-05-1997
US 6071503	A 06-06-2000	US 6074654 A US 6340466 B1 AT 225643 T AU 719603 B2 AU 7476096 A AU 721756 B2 AU 7476196 A AU 721752 B2 AU 7522096 A BR 9611420 A	13-06-2000 22-01-2002 15-10-2002 11-05-2000 29-05-1997 13-07-2000 29-05-1997 13-07-2000 29-05-1997 23-02-1999

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/10690

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 6071503	A		BR 9611421 A BR 9611431 A CA 2236790 A1 CA 2236942 A1 CA 2236974 A1 CN 1204252 A ,B CN 1206345 A ,B CZ 9801404 A3 CZ 9801406 A3 CZ 9801408 A3 DE 69624255 D1 DE 69624255 T2 EP 0862411 A1 EP 0862412 A1 EP 0868169 A1 ES 2180804 T3 HU 9900113 A2 HU 9901986 A2 JP 2000500135 T JP 2000501074 T JP 2000501075 T NO 982033 A NO 982034 A NO 982035 A NZ 321429 A NZ 321430 A NZ 321800 A PL 326676 A1 PL 326679 A1 PL 326705 A1 SK 59298 A3 SK 59398 A3 SK 59498 A3 TR 9800809 T2 TR 9800810 T2 TR 9800812 T2	23-02-1999 23-02-1999 15-05-1997 15-05-1997 15-05-1997 06-01-1999 27-01-1999 14-10-1998 14-10-1998 16-09-1998 14-11-2002 12-06-2003 09-09-1998 09-09-1998 07-10-1998 16-02-2003 28-05-1999 29-11-1999 11-01-2000 02-02-2000 02-02-2000 07-07-1998 07-07-1998 07-07-1998 29-11-1999 28-10-1999 28-10-1999 12-10-1998 12-10-1998 26-10-1998 04-11-1998 04-11-1998 04-11-1998 21-09-1998 21-09-1998 21-07-1998
US 5318775	A	07-06-1994	US 5085855 A	04-02-1992
JP 61065809	A	04-04-1986	JP 2023989 C JP 6015452 B	26-02-1996 02-03-1994
EP 0602905	A	22-06-1994	AU 662447 B2 AU 4870393 A BR 9304975 A CA 2107253 A1 DE 69331985 D1 DE 69331985 T2 DE 602905 T1 EP 0602905 A2 ES 2070804 T1 IL 107169 A JP 2636713 B2 JP 6199630 A SG 49238 A1 US 5505937 A ZA 9308092 A	31-08-1995 30-06-1994 26-07-1994 16-06-1994 11-07-2002 31-10-2002 28-09-1995 22-06-1994 16-06-1995 05-04-1998 30-07-1997 19-07-1994 18-05-1998 09-04-1996 07-06-1994

## INTERNATIONAL SEARCH REPORT

## Information on patent family members

Int'l Application No  
PCT/US 03/10690

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 6027738	A 22-02-2000	AU 1287199 A		24-05-1999
		EP 0975309 A1		02-02-2000
		JP 2001507376 T		05-06-2001
		WO 9922696 A1		14-05-1999
WO 9619185	A 27-06-1996	AU 4288996 A		10-07-1996
		CA 2208443 A1		27-06-1996
		CN 1173125 A		11-02-1998
		EP 0794759 A1		17-09-1997
		JP 10508867 T		02-09-1998
		WO 9619185 A1		27-06-1996

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